Response

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LETTER TO THE EDITOR

Response: The Value of Sentinel Lymph Node Biopsy in the Management of Head and Neck Melanoma

To the Editor

The possibility that sentinel lymph node biopsy may increase the risk of in-transit metastases, thereby reducing, eliminating, or reversing any potential survival advantage associated with the sentinel lymph node biopsy technique, is an area of ongoing debate and reflects the letter to the editor of Dr. Alvarado, Dr. Sondak, and Dr. Leong.

In a review of the literature Thomas calculated a 20.9% incidence of local or in-transit metastases in those who underwent complete lymph node dissection because of tumor-positive sentinel lymph nodes and a 5.7% incidence in patients who had tumor-negative sentinel lymph nodes and did not undergo complete lymph node dissection [1].

In a study (N = 250) of the Netherlands Cancer Institute in-transit metastases were found in 23% of the sentinel lymph node-positive group and in 7% of the sentinel lymph node-negative group [2]. These percentages are comparable with the incidence of in-transit metastases that were found in the UMCG series (N = 300); 20% and 4%, respectively ($P < 0.001$) [3].

We agree with our correspondents that a critical analysis of the data from multicenter studies from both the United States and Australia, provides compelling evidence that the sentinel lymph node biopsy procedure and complete lymph node dissection in sentinel lymph node-positive patients do not increase the incidence of in-transit metastases [4,5]. It seems indeed most likely that in-transit metastasis is the result of inherently adverse biology rather than mechanical disruption of the proximal nodal basin caused by either sentinel lymph node biopsy or subsequent complete lymph node dissection.

With regards to the impact of sentinel lymph node biopsy on clinical outcome, the authors correctly point out that the results of the SLN Working Group and the Multicenter Selective Lymphadenectomy Trial I (MSLT-I) indicate a significantly higher disease-free survival rate after immediate complete lymph node dissection for occult nodal metastases than delayed complete lymph node dissection for clinical nodal recurrence. Furthermore, MSLT-I showed a significant higher overall melanoma-specific survival benefit of early regional node dissection based on the sentinel node status as well [6,7].

For staging and assessment of prognosis in primary melanoma, and for identifying patients who may benefit from immediate complete lymph node dissection, it seems justified that sentinel lymph node biopsy becomes standard in the management of melanoma patients.

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REFERENCES

1. Thomas JM, Clark MA: Selective lymphadenectomy in sentinel node-positive patients may increase the risk of local/in-transit recurrence in malignant melanoma. Eur J Surg Oncol 2004;30: 686–691.
2. Estourgie SH, Nieweg OE, Valdes Olmos RA, et al.: Review and evaluation of sentinel node procedures in 250 melanoma patients with a median follow-up of 6 years. Ann Surg Oncol 2003;10:681–688.
3. de Vries M, Jager PL, Suurmeijer AJ, et al.: Sentinel lymph node biopsy for melanoma: Prognostic value and disadvantages in 300 patients. Ned Tijdschr Geneeskd 2005;149:1845–1851.
4. Kang JC, Wanek LA, Essner R, et al.: Sentinel lymphadenectomy does not increase the incidence of in-transit metastases in primary melanoma. J Clin Oncol 2005;23:4764–4770.
5. Pawlik TM, Ross MI, Thompson JF, et al.: The risk of in-transit melanoma metastasis depends on tumor biology and not the surgical approach to regional lymph nodes. J Clin Oncol 2005;23: 4588–4590.
6. Morton DL, Thompson JF, Cochran AJ, et al.: Interim results of the Multicenter Selective Lymphadenectomy Trial (MSLT-1) in clinical stage 1 melanoma. J Clin Oncol 2005;23:S710.
7. Morton DL, Thompson JF, Cochran AJ, Mozzillo N, Elashoff R, Essner R, Nieweg OE, Roses DF, Hoekstra HJ, Karakousis CP, Reintgen DS, Coventry BJ, Glass EC, Wang HJ; MSLT Group: Sentinel-node biopsy or nodal observation in melanoma. N Engl J Med 2006;355:1307–1317.

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